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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/772,337

02/06/2004

Seok Hwa Jeong

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EXAMINER

YENKE, BRIAN P

ART UNIT

PAPER NUMBER

2622

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/772,337	<b>Applicant(s)</b> JEONG, SEOK HWA	
	<b>Examiner</b> BRIAN P. YENKE	<b>Art Unit</b> 2622	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on RCE (05/06/09)/Amendment (04/02/09).
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 2-4,6-18 and 20-31 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) all the above is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission (RCE 05/06/09, amendment 04/02/09) has been entered.

### ***Response to Arguments***

2. Applicant's arguments with respect to claims have been considered but are moot in view of the new ground(s) of rejection.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2-4, 6-18, and 20-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shintani, US 5,978,046 in view of Jeong, US 6,256,027 and Hayashi et al., US 5,434,626 and Cohen-Solal, US 7,206,029

In considering claim 11,

a) the claimed a key input...is met by remote commander 24 (Fig 1).

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b) the claimed a main-picture...is met by main tuner 4 along with main image signal circuit 8 (Fig 1)

c) the claimed a sub-picture...is met by sub-tuner 5 along with sub-image circuit 18 along with synthesizing circuit 9.

d) the claimed a micro-controller...is met by system control circuit 19

e) the claimed a PIP processing unit is met by synthesizing circuit 9 which includes a memory for combining the sub (including multiple sub pictures) and a main picture to display a PIP (col 4, line 10-36).

Although Shintani discloses various display options along with a remote control 24, Shintani does not explicitly disclose the details of such, nor does Shintani disclose superimposing.

The examiner incorporates Jeong, US 6,256,027 which evidences the concept of user input controlled/OSD display which allows the user to adjust the displayed pictures parameters (i.e. volume, size, brightness etc....) (Fig 2, col 4, line 27-41).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Shintani which discloses a PIP display system by allowing the user to adjust the parameters of the displayed signal(s) to include the subpictures to suit their individual preferences/desires.

Regarding the superimposing a sub-picture OSD menu on a main picture region... although the combination above does not explicitly recite the features of displaying a subpicture in response to a first selection...the examiner incorporates Hayashi Fig 4c, (col 9k line 23-67) which discloses a main image 36a, and the selection of a sub-image 36c, wherein the selection of a subimage menu screen provides/superimposes subimage menu 36b onto main screen 36a as shown.

Thus it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Shintani/Jong by displaying the submenu OSD image on the screen, wherein the user is able to view the image to be modified (in this instance subimage) and the menu which is associated with such, for the obvious benefit of being able to see what changes can be made and seeing what may need to be changed.

Regarding the newly amended first location or second location is set by the user, although conventional in the art, the examiner will nonetheless evidence such by incorporating Cohen-Solal, US

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7,206,029 which discloses a system which allows the user to reposition (meeting the 1<sup>st</sup>/2<sup>nd</sup> location etc...)the displayed images (PIP) either manually (via buttons 137a-d, col 3, line 1-19, Fig 1) in addition to the user selection of a PIP automatic reposition mode (via buttons 136a-b). Although it is noted that Cohen-Solal discloses repositioning the sub-display, the features of modifying the position of a secondary picture, display, menu provide the same advantages thus being obvious to one of ordinary skill in the art.

The motivation for modifying Shintani/Jeong/Hayashi would provide the user/system the ability to view multiple pictures with the ability to move a picture if desire (i.e. to avoid the subpicture obscuring the display of a portion of the main portion etc...).

In considering claims 2-3,

The incorporated Jeong reference discloses an OSD generating section which displays/control a corresponding selection function for an appliance, wherein the amount of adjustment is indicated/provided (Fig 3a-3f), parameters including (i.e. volume, size, brightness etc....) (Fig 2, col 4, line 27-41).

In considering claim 4, 6-10 and 12-16,

As stated with respect to claim 11 above, the combination of Shintani and Jeong provides a system which allows a user to adjust the display of a main and/or subpictures, wherein the OSD displayed is on a displayed main image (shown by Jeong (Fig 2, related description, Figs 3a-3f) and Hayashi once the subimage screen is displayed and subimage menu OSD is selected.

In considering claim 17,

Shintani discloses luminance (Yx) and chrominance/color components (R-Y and B-Y), stored in the memory/synthesizing circuit 9 (Fig 1).

In considering claim 18,

Refer to the rejection of claim 11 above.

In considering claim 20,

Refer to the rejection of claim 11 above.

In considering claim 21,

Refer to the rejection of claim 11 above.

In considering claim 22,

Refer to the rejection of claim 11 above.

In considering claim 23,

Refer to the rejection of claim 11 above.

In considering claim 24,

Refer to the rejection of claim 11 above.

In considering claim 25,

Refer to the rejection of claim 1 above.

In considering claim 26,

As disclosed above with respect to claim 11, Jeong discloses the size adjustment of an OSD menu (col 6, line 6-19), and the newly incorporated Cohen-Solal, US 7,206,029 discloses the features of allowing the user to reposition a secondary display (manually or automatically).

In considering claim 27,

As shown by Shintani, the sub screens are smaller than the main image.

In considering claim 28,

As shown by Jeong, the displaying of a graphical icon to illustrate the amount of change in a characteristic of the displayed image, can take on various forms (see Figs 3a-3g).

In considering claims 29 and 31,

As shown in Figs 5-6 of Shintani, the changing/position appearance of the subscreens is independent of the main screen.

In considering claims 30,

Hayashi discloses that the submenu OSD display may be use to adjust the volume of the sub-image, thus independent of the main picture.

### ***Conclusion***

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4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian Yenke whose telephone number is (571)272-7359. The examiner work schedule is Monday-Thursday, 0730-1830 hrs.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's Supervisor, Dave Ometz, can be reached at (571)272-7593.

**Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks  
Washington, D.C. 20231

**or faxed to:**

**(571)-273-8300**

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703)305-HELP.

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An automated message system is available 7 days a week, 24 hours a day providing informational responses to frequently asked questions and the ability to order certain documents. Customer service representatives are available to answer questions, send materials or connect customers with other offices of the USPTO from 8:30 a.m. - 8:00p.m. EST/EDT, Monday-Friday excluding federal holidays.

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For other technical patent information needs, the Patent Assistance Center can be reached through customer service representatives at the above numbers, Monday through Friday (except federal holidays) from 8:30 a.m. to 5:00 p.m. EST/EDT.

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/BRIAN P. YENKE/  
Primary Examiner, Art Unit 2622

B.P.Y.

17 Jun 09